AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-19 (Canceled).

Claim 20. (New) A process for preparing high density green compacts comprising the following steps:

(a) providing an iron or iron-based powder wherein less than about 5% of the iron-based powder particles have a size below 45 μm;

(b) uniaxially compacting the powder in a die at a compaction pressure of at least about 800 MPa; and

(c) ejecting the green body from the die.

Claim 21. (New) The process of claim 20, further comprising mixing said powder with graphite and other additives.

Claim 22. (New) The process of claim 20, wherein the compaction is performed in a single step.

Claim 23. (New) The process of claim 26, wherein at least about 50% of the iron-based powder consists of particles having a particle size above about 106 μm.

Claim 24. (New) The process of claim 20, wherein at least about 60% of the iron-based powder consists of particles having a particle size above about 106 μm.

Claim 25. (New) The process of claim 20, wherein at least about 70% of the iron-based powder consists of particles having a particle size above about 106 μm.

Claim 26. (New) The process of claim 20, wherein at least 50% of the iron-based powder consists of particles having a particle size above about 212 μm.

Claim 27. (New) The process of claim 26, wherein at least 60% of the iron-based powder consists of particles having a particle size above about 212 μm.

Claim 28. (New) The process of claim 26, wherein at least 70% of the iron-based powder consists of particles having a particle size above about 212 μm.

Claim 29. (New) The process according to claim 26, wherein the maximum particle size is about 2 mm.

Claim 30. (New) The process of claim 22, wherein the graphite is present in an amount of about 0.1 to 1.0%.

Claim 31. (New) The process of claim 20, wherein the iron-based powder is combined with a lubricant in an amount between about 0.05 and about 0.6% by weight before compaction.

Claim 32. (New) The process of claim 20, wherein the compaction is performed in a lubricated die.

Claim 33. (New) The process of claim 31, wherein the compaction is performed by using a combination of internal and external lubrication.

Claim 34. (New) The process of claim 20, wherein the additives are selected from the group consisting of alloying elements, machinability enhancing agents, hard phase materials and flow agents.

Claim 35. (New) The process of claims 20, wherein the compaction is performed at a pressure of at least 900 MPa.

Claim 36. (New) The process of claims 35, wherein the compaction is performed at a pressure of at least 1000 MPa.

Claim 37. (New) The process of claims 35, wherein the compaction is performed at a pressure of at least 1100 MPa.

Claim 38. (New) The process of claim 20, wherein the compaction is performed at ambient temperature.

Claim 39. (New) The process of claim 20, wherein the compaction is performed at elevated temperature.

Claim 40. (New) The process of claim 20 further comprising sintering in a single step at a temperature above 1100°C.

Claim 41. (New) A powder composition comprising an iron or iron-based powder wherein less than about 5% of the powder particles have a size below 45 μm; and 0.1-1.0% by weight of graphite.

Claim 42. (New) The powder composition of claim 41 further including about 0.05 to 0.6% by weight of a lubricant.

Claim 43. (New) The powder composition of claim 41, wherein at least 50% of the iron-based powder have a particle size above about 106 μm.

Claim 44. (New) The powder composition of claim 43, wherein at least 60% of the iron-based powder have a particle size above about 106 μm.

Claim 45. (New) The powder composition of claim 43, wherein at least 70% of the iron-based powder have a particle size above about 106 μm.

Claim 46. (New) The composition of claim 43, wherein at least 50% of the iron-based powder particles have a particle size above about 212 μm.

Claim 47. (New) The composition of claim 41 further including additives selected from the group consisting alloying elements Mn, Cu, Ni, Cr, Mo, V, Co, W, Nb, Ti, Al, P, S, B, machinability enhancing agents, hard phase materials and flow agents.

Claim 48. (New) The process of claim 34, wherein the alloying element is selected from the group consisting of Mn, Cu, Ni, Cr, Mo, V, Co, W, Nb, Ti, Al, P, S and B.